



# SEQUENCE LISTING

<110> Reiter, Robert E.  
Witte, Owen N.  
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Jakobovits, Aya

<120> PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF

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<140> 09/934,773

<141> 2001-08-21

<150> 09/564,329

<151> 2000-05-03

<150> 09/359,326

<151> 1999-07-20

<150> 09/318,503

<151> 1999-05-25

<150> 09/251,835

<151> 1999-02-17

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<151> 1998-12-02

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<151> 1998-03-10

<150> 60/124,658

<151> 1999-03-16

<150> 60/120,536

<151> 1999-02-17

<150> 60/113,230

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<150> 60/074,675

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<151> 1998-01-12

<150> 60/228,816

<151> 1997-03-10

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<170> PatentIn Ver. 2.0

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<211> 998

<212> DNA

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gcctgcaggtt ggagaactgc acccagctgg gggagcagtg ctggaccgcg cgcacccgcg 180
cagttggcctt cctgaccgtc atcagcaaag gctgcagctt gaactgcgtg gatgactcac 240
aggactacta cgtgggcaag aagaacatca cgtgctgtga caccgacttg tgcaacgcca 300
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tgctgctctg gggagccggc cagctatagg ctctgggggg ccccgctgca gcccacactg 420
ggtgtggtgc cccaggcctt tgtgccaatc ctcacagaac ctggcccagt gggagcctgt 480
cctggttctt gaggcacatc ctaacgcaag tttgaccatg tatgtttgca ccccttttcc 540
ccnaaccctg accttcccat gggccttttc caggattccn accnggcaga tcagttttag 600
tganacanat ccgctgcag atggcccctc caacntttt tgttgntggt tccatggccc 660
agcattttcc acccttaacc ctgtgttcag gcaactnttc cccaggaag ccttccctgc 720
ccaccccat tattaattga gccaggtttg gtccgtggtg tccccgcac ccagcagggg 780
acaggcaatc agggggccc agtaaaggct gagatgaagt ggactgagta gaactggagg 840
acaagagttg acgtgagttc ctgggagttt ccagagatgg ggcctggagg cctggaggaa 900
ggggccaggc ctcacatttg tgggntccc gaatggcagc ctgagcacag cgtaggccct 960
taataaacac ctgttgata agccaaaaaa aaaaaaaa 998
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<211> 123

<212> PRT

<213> Homo sapiens

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<222> (67)..(81)

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  1           5           10          15
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Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn
  20           25          30
```

```
Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys
  35           40          45
```

```
Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
  50           55          60
```

```
Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly
  65           70          75          80
```

```
Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly
  85           90          95
```

```
Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala
 100           105          110
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Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu  
115 120

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<211> 441  
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<213> Mus musculus

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ctgcagtgt attcatgcac agcacagatg aacaacagag actgtctgaa tgtacagaac 120  
tgcagcctgg accagcacag ttgctttaca tcgcgcatcc gggccattgg actcgtgaca 180  
gttatcagta agggctgcag ctacacagtgt gaggatgact cggagaacta ctatttgggc 240  
aagaagaaca tcacgtgctg ctactctgac ctgtgcaatg tcaacggggc ccacaccctg 300  
aagccacca ccaccctggg gctgctgacc gtgctctgca gcctgttgct gtggggctcc 360  
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<210> 4  
<211> 123  
<212> PRT  
<213> Mus musculus

<400> 4  
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Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn  
20 25 30  
Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys  
35 40 45  
Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys  
50 55 60  
Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly  
65 70 75 80  
Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly  
85 90 95  
Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu  
100 105 110  
Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu  
115 120

<210> 5  
<211> 131  
<212> PRT  
<213> Homo sapiens

<400> 5

Met Lys Ile Phe Leu Pro Val Leu Leu Ala Ala Leu Leu Gly Val Glu  
1 5 10 15

Arg Ala Ser Ser Leu Met Cys Phe Ser Cys Leu Asn Gln Lys Ser Asn  
20 25 30

Leu Tyr Cys Leu Lys Pro Thr Ile Cys Ser Asp Gln Asp Asn Tyr Cys  
35 40 45

Val Thr Val Ser Ala Ser Ala Gly Ile Gly Asn Leu Val Thr Phe Gly  
50 55 60

His Ser Leu Ser Lys Thr Cys Ser Pro Ala Cys Pro Ile Pro Glu Gly  
65 70 75 80

Val Asn Val Gly Val Ala Ser Met Gly Ile Ser Cys Cys Gln Ser Phe  
85 90 95

Leu Cys Asn Phe Ser Ala Ala Asp Gly Gly Leu Arg Ala Ser Val Thr  
100 105 110

Leu Leu Gly Ala Gly Leu Leu Leu Ser Leu Leu Pro Ala Leu Leu Arg  
115 120 125

Phe Gly Pro  
130

<210> 6

<211> 123

<212> PRT

<213> Homo sapiens

<400> 6

Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly Leu Ala Leu Gln  
1 5 10 15

Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn  
20 25 30

Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys  
35 40 45

Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys  
50 55 60

Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly  
65 70 75 80

Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly  
85 90 95

Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala  
100 105 110

Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu  
115 120

<210> 7  
<211> 123  
<212> PRT  
<213> Mus musculus

<400> 7  
Met Lys Thr Val Leu Phe Leu Leu Leu Ala Thr Tyr Leu Ala Leu His  
1 5 10 15  
Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn  
20 25 30  
Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys  
35 40 45  
Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys  
50 55 60  
Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly  
65 70 75 80  
Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly  
85 90 95  
Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu  
100 105 110  
Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu  
115 120

<210> 8  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: RT-PCR PRIMER

<400> 8  
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<210> 9  
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<212> DNA  
<213> Artificial Sequence

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<210> 10  
<211> 408

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: MONOCLONAL  
ANTIBODY 1G8

<400> 10

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ggggcagaac ttgtgaggtc aggggcctca gtcaagttgt cctgcacagc ttctggcttc 120
aacattaaag actactatat acactgggtg aatcagaggc ctgaccaggg cctggagtgg 180
attggatgga ttgatcctga gaatgggtgac actgaatttg tcccgaagtt ccagggcaag 240
gccactatga ctgcagacat tttctccaac acagcctacc tgcacctcag cagcctgaca 300
tctgaagaca ctgccgtcta ttactgtaaa acgggggggtt tctggggcca agggactctg 360
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<210> 11

<211> 136

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: MONOCLONAL  
ANTIBODY 1G8

<400> 11

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Cys Phe Phe Leu Met Ala Val Val Ile Gly Val Asn Ser Glu Val Gln
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Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Ser Gly Ala Ser Val Lys
      20             25             30

Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Tyr Tyr Ile His
      35             40             45

Trp Val Asn Gln Arg Pro Asp Gln Gly Leu Glu Trp Ile Gly Trp Ile
      50             55             60

Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe Gln Gly Lys
      65             70             75             80

Ala Thr Met Thr Ala Asp Ile Phe Ser Asn Thr Ala Tyr Leu His Leu
      85             90             95

Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Lys Thr Gly
      100            105            110

Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala Ala Lys Thr
      115            120            125

Thr Pro Pro Ser Val Tyr Pro Leu
      130            135
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<210> 12

<211> 426

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: MONOCLONAL  
ANTIBODY 4A10

<400> 12

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agctactgga tgcactgggt gaagcagagg cctggacaag gccttgagtg gattggaaat 180
attgaccctg gtagtggtta cactaactac gctgagaacc tcaagaccaa ggccacactg 240
actgtagaca catcctccag cacagcctac atgcagctca gcagcctgac atctgaggac 300
tctgcagtct attactgtac aagccgatct actatgatta cgacgggatt tgcttactgg 360
ggccaaggga ctctggtcac tgtctctgca gctacaacaa cagcccatc tgtctatcca 420
ctggcc                                         426
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<211> 142

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: MONOCLONAL  
ANTIBODY 4A10

<400> 13

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 1              5              10              15

Pro Gly Ser Glu Leu Val Arg Pro Gly Thr Ser Val Lys Leu Ser Cys
      20              25              30

Lys Ala Ser Gly Tyr Thr Phe Ser Ser Tyr Trp Met His Trp Val Lys
      35              40              45

Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly Asn Ile Asp Pro Gly
      50              55              60

Ser Gly Tyr Thr Asn Tyr Ala Glu Asn Leu Lys Thr Lys Ala Thr Leu
      65              70              75              80

Thr Val Asp Thr Ser Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu
      85              90              95

Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys Thr Ser Arg Ser Thr Met
      100             105             110

Ile Thr Thr Gly Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
      115             120             125

Ser Ala Ala Thr Thr Thr Ala Pro Ser Val Tyr Pro Leu Ala
      130             135             140
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<210> 14

<211> 453

<212> DNA



<213> Artificial Sequence

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ANTIBODY 2H9

<400> 14

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gtgaggcttg aggagtctgg aggaggctgg gtgcaacctg gaggatccat gaaactctcc 120
tgtgtagcct ctggatttac tticagtaat tactggatga cttgggtccg ccagtctcca 180
gagaaggggc ttgagtgggt tgctgaaatt cgattgagat ctgaaaatta tgcaacacat 240
tatgcgaggt ctgtgaaagg gaaattcacc atctcaagag atgattccag aagtcgtctc 300
tacctgcaaa tgaacaactt aagacctgaa gacagtggaa tttattactg tacagatggt 360
ctgggacgac ctaactgggg ccaagggact ctgggtcactg tctctgcagc caaacgcaca 420
cccccatctg totatccact ggcccccttgt gta 453
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<210> 15

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<212> PRT

<213> Artificial Sequence

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```

```
Val Arg Ser Glu Val Arg Leu Glu Glu Ser Gly Gly Gly Trp Val Gln
      20             25             30
```

```
Pro Gly Gly Ser Met Lys Leu Ser Cys Val Ala Ser Gly Phe Thr Phe
      35             40             45
```

```
Ser Asn Tyr Trp Met Thr Trp Val Arg Gln Ser Pro Glu Lys Gly Leu
      50             55             60
```

```
Glu Trp Val Ala Glu Ile Arg Leu Arg Ser Glu Asn Tyr Ala Thr His
      65             70             75             80
```

```
Tyr Ala Glu Ser Val Lys Gly Lys Phe Thr Ile Ser Arg Asp Asp Ser
      85             90             95
```

```
Arg Ser Arg Leu Tyr Leu Gln Met Asn Asn Leu Arg Pro Glu Asp Ser
      100            105            110
```

```
Gly Ile Tyr Tyr Cys Thr Asp Gly Leu Gly Arg Pro Asn Trp Gly Gln
      115            120            125
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```
Gly Thr Leu Val Thr Val Ser Ala Ala Lys Thr Thr Pro Pro Ser Val
      130            135            140
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Tyr Pro Leu Ala Pro Cys Val
      145            150
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<210> 16  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 16  
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1 5 10 15

<210> 17  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 17  
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1 5 10

<210> 18  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 18  
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<223> Description of Artificial Sequence: RT-PCR PRIMER

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<210> 22

<211> 32

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: RT-PCR PRIMER

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32

<210> 23

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: RT-PCR PRIMER

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30

<210> 24

<211> 26

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: RT-PCR PRIMER

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26

<210> 25

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: RT-PCR PRIMER

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<221> misc\_feature

<222> (22)

<223> g or c

<220>  
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<222> (28)  
<223> g or t

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<222> (31)  
<223> a or c

<220>  
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<222> (34)  
<223> g or c

<400> 25  
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39

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<211> 39  
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<223> a or g

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<223> c or t

<220>

<221> misc\_feature

<222> (33)

<223> g or t

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39